INTEGRATED CIRCUIT PACKAGE CAPABLE OF OPERATING IN MULTIPLE ORIENTATIONS

Abstract of the Disclosure

An integrated circuit design is provided capable of operating in multiple insertion orientations. In particular, the inventive circuit design includes an integrated circuit package having a plurality of contact elements extending from the integrated circuit package and arranged symmetrically thereon for enabling the integrated circuit to be inserted on a circuit board in at least two discrete orientations. A plurality of the contact elements are designated as orientation pins, the orientation pins being arranged such that, upon integrated circuit package power up, the orientation pins transmit orientation signals indicative of the integrated circuit packages insertion orientation in the circuit board. A plurality of multiplexer devices are provided for routing signals between the contact elements and integrated circuit functional circuitry in response to the orientation signals from the orientation pins.